REMARKS

In view of the above amendments and the following remarks, reconsideration and further examination are requested.

In response to the objection of the specification, paragraph [0005] on page two of the substitute specification has been amended to correct the typographically errors. No new matter has been added. As a result, withdrawal of this objection is respectfully requested.

Claims 1-3, 6 and 8-13 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Duan (US 6,028,564) in view of Edward (US 4,825,220). Claims 4 and 5 have been rejected under 35 U.S.C. §103(a) as being unpatentable over Duan in view of Edward and further in view of Saunders (US 6,343,369). Claim 7 has been indicated as containing allowable subject matter. The Applicants would like to thank the Examiner for this indication of allowable subject matter.

Claim 1 has been amended so as to further distinguish the present invention from the references relied upon in the above-mentioned rejections. It is submitted that the rejections are inapplicable to the claims for the following reasons.

Claim 1 is patentable over the combination of Duan and Edward, since claim 1 recites a matching-circuit impedance adjusting method for adjusting impedance of a matching circuit by, in a matching circuit having a pattern line, partly cutting out at least one stub protruding widthwise from the pattern line, the method including forming an auxiliary cut-and-removed portion by partly cutting and removing the at least one stub so that the at least one stub is made apparently longer, measuring an impedance, and processing the auxiliary cut-and-remove portion until the auxiliary cut-and-remove portion is processed to reach a reference value. The combination of Duan and Edward fails to disclose or suggest these features of claim 1.

Duan discloses a dipole antenna 400 having a pair of terminals 370 and a pair of tuning stubs 710, 720. The stub 710 has a wider separation 116A and a shorter length 612A than a separation 116B and length 612B of the stub 720. The placement of the tuning stubs 710, 720 on the dipole antenna 400 has an effect on the impedance of the dipole antenna 400. (See column 12, lines 47-67 and Figure 7A).

Based on the above description, it is apparent that the tuning stubs 710, 720 are created by bending a piece of wire that makes up the dipole antenna 400. That is, the tuning stubs 710, 720 are

integral portions of the dipole antenna 400 that can be created with varying amounts of separation 116 and length 612 depending on where the wire comprising the dipole antenna 400 is bent. Further, since the tuning stubs 710, 720 are formed by bending, it does not appear that the tuning stubs 710, 720 can be further adjusted to attain a reference value.

Since the tuning stubs 710, 720 are made by bending the wire comprising the dipole antenna 400, it is apparent Duan fails to disclose or suggest any of the operations of forming an auxiliary cut-and-removed portion by partly cutting and removing at least one stub so that the at least one stub is made apparently longer, measuring an impedance, and processing the auxiliary cut-and-remove portion until the auxiliary cut-and-remove portion is processed to reach a reference value recited in claim 1.

Edward discloses a microstrip fed printed dipole with an integral balun. The design allows for double tuning of the dipole-balun impedance. Tuning for optimum performance is possible by adjusting the electric length of quantities theta b and theta ab. The quantity theta b is the electrical length of the microstrip which is defined by strip conductors 19 and 20 along a path measured from a slot 16 to the end of the strip conductor 20. The quantity theta ab is the electrical length of the microstrip which is defined by segment 9. The quantities theta ab and theta b can be adjusted with the use of laser trimming to remove material. The amount to be trimmed is determining based on an analytical curve (See column 5, line 46 - column 6, line 63 and Figures 1A-2B).

While Edward does disclose using laser trimming to remove material for tuning purposes, Edward does not disclose or suggest forming an auxiliary cut-and-removed portion by partly cutting and removing the microstrip so that the microstrip is made apparently longer. Instead, Edward only appears to contemplate shorting the length of the microstrip. As a result, it is apparent that the combination of Duan and Edward fails to disclose or suggest the present invention as recited in claim 1.

As for Saunders, it discloses the use of a laser beam 360 to cut a number slits in a probe member 354. Further, Saunders discloses a number of different embodiments of probes having a number of fingers with slits located therebetween. (See column 18, line 27-45, column 21, line 40 - column 22, line13, and Figures 19 and 24A-24C). However, it is apparent that Saunders also fails to disclose or suggest forming an auxiliary cut-and-removed portion by partly cutting and removing

at least one stub so that the at least one stub is made apparently longer, since all of the slits in the probes are formed parallel to the direction of current flow and therefore, do not make any of the fingers apparently longer.

Because of the above mentioned distinctions, it is believed clear that claims 1-13 are allowable over Duan, Edward, and Saunders. Furthermore, it is submitted that the distinctions are such that a person having ordinary skill in the art at the time of invention would not have been motivated to make any combination of the references of record in such a manner as to result in, or otherwise render obvious, the present invention as recited in claims 1-13. Therefore, it is submitted that claims 1-13 are clearly allowable over the prior art of record.

In view of the above amendments and remarks, it is submitted that the present application is now in condition for allowance. The Examiner is invited to contact the undersigned by telephone if it is felt that there are issues remaining which must be resolved before allowance of the application.

Respectfully submitted,

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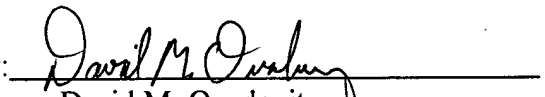
By: 

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August 14, 2003